



# 17th International Input-Output Conference

**TITLE: INPUT OUTPUT MODELING OF IMPACT OF STOCK MARKET ON UNIT PRICES OF MUTUAL FUNDS**

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**ABSTRACT:**

Stock markets are known world over for their volatility and fragility. Gold, real estate, and futures' markets move in unison with stock market. But gold and real estate markets are more stable than stock market. All the financial institutions, business houses and economy are affected stock market. In and outflows of foreign investment, including FDI, also affect stock market. Domestic investment is also related to stock market. Returns yielded to investors by mutual funds depend greatly upon stock prices which MFs park their funds. This paper attempts to analyse impact in stock prices upon the returns of mutual funds, and hence, unit prices, and impact of investment in mutual funds on growth of different sectors. An Input output model has been developed for this purpose. The financial sector reforms, role of regulatory authorities and high rapid growth of income, and savings moved investors to stocks and mutual funds in 1980s. The attraction has been also raised by mutual funds provide the savings in income tax furnish advantage of knowledge and expertise to patrons, who largely belong to middle and upper middle income groups having no risk seeking propensity. The problem has not been studied in input output frame work. Changes in stock index affect unit prices far as prices of most stocks rise or fall together. Rise in index may raise prices of stocks held by mutual funds. There is direct relation between stock prices and prices of mutual funds. Impact of changes in stock prices will impact unit prices directly and indirectly through linkages; for their study we have developed an input output model. Model The input output price model is as follows:  $P = (I-A)^{-1} V$  .....(1) Where P is commodity price vector, (I-A)<sup>-1</sup> is Leontief Inverse, and V is value added vector per unit of output. First we consider mechanism of calculation of unit prices. Unit prices are derived from NAV:  $(GAV - E) = NAV$ ; ..... (2)  $UP = NAV/UI$ ; Where GAV and NAV are gross and net asset values of mutual funds, E are expenses. UP shows unit price, and UI total units. GAV depends on returns earned by MFs from different instruments, including stocks for isolating earnings from stocks from other earnings, we first estimate  $GAV(1) = GAV - GAV(2)$  .....(3) Where GAV(2) is gross value of assets other than stocks, and GAV(1) is gross value of stocks.  $GAV(1) = \text{Total Stocks Held/No. of Shares}$ . The base of modeling of mutual funds shall be the level of in



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and out flows of funds. The structure of Inflows-Outflows of funds to and from different sources will be the base of the model. Data Flows shall be integrated in input- output model which shall be worked out empirically from 2003-04 input-output table of India and data collected about funds from other sources. Outflow of mutual funds will be classified into appropriate sectors of input output tables.